

The bug interns

By Judy Blanco, University of Washington graduate student and King County Science Intern

Officially we are called Student-Assistants for King County’s Science and Technical Support Section’s Benthic Macroinvertebrate Monitoring Program. But around the office we are known as “The Bug Interns.”

While not bugs ourselves, we are decidedly “pro bug,” because this program monitors creatures who command considerable respect in scientific circles. As well as being a crucial link in the food chain, benthic macroinvertebrates, or “stream bugs,” play a critical role in determining aspects of King County’s environmental health.

Bug populations are highly responsive to both chemical and physical environmental conditions and effects. Consequently, an increase or decrease in the number of bugs present in our streams indicates changes in water quality and physical stream characteristics. The causes of these changes include the effects of urbanization, agricultural practices, and climate change. Studying the bugs can tell us more about how the stresses we are putting on the environment affect the health of our aquatic resources.

Bug collaboration

Started in 2001, the monitoring program is currently undergoing a renovation that makes this a particularly exciting year to be a Bug Intern. A data management system for stream benthic macroinvertebrates is being developed jointly for King, Pierce and Snohomish counties as well as the City of Seattle. This collaboration will give us the opportunity to track changes in our environment at multiple scales. It will not only offer us a better understanding of development impacts in our region as a whole, but it will be a more effective way to assess the quality of life



Chris Gregersen, Audrey Djunaedi, Judy Blanco, and Carolyn Shores monitoring bugs.

in individual streams as they flow through different jurisdictions and various urban development conditions.

A bug internship

The Bug Internship is a comprehensive learning experience. In our first week alone, we visited two restoration projects that are a part of the Agricultural Drainage Assistance Program; sampled macroinvertebrates in eight streams; and organized and compiled data associated with the monitoring program.

As a group, the interns bring a variety of skills to the job:

Chris Gregersen, is a Wildlife Ecology junior at Washington State University in the Natural Resource Sciences Department. Chris has extensive scientific fieldwork and data analysis experience and is interested in pursuing a career that supports natural resources.

Audrey Djunaedi is a student in the School of Aquatic and Fishery Sciences at the University of Washington. Audrey’s academic and scientific field experience along with her work as an interpreter at the Seattle Aquarium has given her the unique ability to collaborate with diverse groups of people, from the average citizen to scientists and educators.


Carolyn Shores is a Conservation Biology and International Studies senior at the University of Washington. She recently completed a field research study on the density of larval dragonflies in blackbird habitats in Eastern Washington. She is also currently assisting with research in a plant ecophysiology lab at the UW.

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I am a graduate student in the Landscape Architecture Department at the University of Washington, and my interests are in stream restoration and integrated watershed management. Along with being out in the streams sampling bugs, I will be using King County's Geographic Information System to map land use in relation to stream activity.

One of the best things about being a Bug Intern is that we are surrounded by the Science Staff and others at King County's Department of Natural Resources and Parks who are passionate about their work. We hope to make this kind of public service a part of our future endeavors. For more information, visit <http://dnr.metrokc.gov/wlr/waterres/bugs/index.htm> ■

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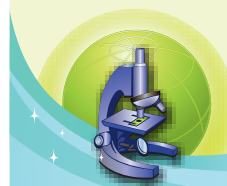
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Send questions, comments and future story ideas to:
Kate O'Laughlin - kate.olaughlin@kingcounty.gov, 206-8363 or
Jim Simmonds - jim.simmonds@kingcounty.gov, 206-1986



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